Draconis, *v Cygni*, *v Sagittarii*, χ *Ophiuchi*, and Cord. Genl. Catal. 7191. I have examined the spectra of all these stars, and in every case the Hα hydrogen line is bright and very much easier to observe than the Hβ line. The hydrogen lines in the violet of these stars are probably dark, for the most part; but photographs of the region Hβ to Hδ of some of these stars show peculiarities of considerable interest, and make a detailed investigation desirable. Thus, in ϕ *Persei* the Hγ and Hδ lines consist each of two narrow bright lines about four tenth-metres apart upon a background but slightly darker than the ordinary continuous spectrum. In *v Cygni* Hβ, Hγ and Hδ consist of narrow bright lines upon broad and nearly dark backgrounds.

Miss A. C. MAURY found from the DRAPER Catalogue plates that Hβ and possibly Hγ in the spectrum of *Pleione* consist each of a narrow bright line on a dark background. The Hα line is bright in this star. Other observers have possibly called attention to that fact, but I am unable to find any such reference.

Qualitative investigations of these spectra cannot be made advantageously by photography with the 36-inch telescope, owing to the large chromatic aberration of the great lenses in the blue and violet. W. W. C.

October 19, 1893.

PRELIMINARY DETERMINATION OF THE ECCENTRICITY OF THE REPSOLD MERIDIAN CIRCLE.

A series of readings was taken upon the east circle, the fixed one, on November 18. The series consists of readings, each 30°, beginning at the nadir setting, through 360°; then reversing the order of settings back to the starting point.

Denoting by c, the reading of the circle at microscope H, the correction for eccentricity for each microscope will be represented by the following:

For Micros. H $e = 2''.85 \sin (c + 243° 45')$
" G $e = 2''.85 \sin (c + 153° 45')$
" F $e = 2''.85 \sin (c + 63° 45')$
" E $e = 2''.85 \sin (c + 333° 45')$

The correction for runs was applied to each microscope; and the position of each, with reference to the mean of four, was taken out from the whole series.

Since the change for any one of the four did not much exceed

0″.1, this has been neglected in making a comparison of the original readings, with the same corrected for eccentricity. This being done for each microscope, the residuals of the readings upon the same circle divisions under different microscopes give an indication of the errors of division. These are found to be sometimes as large as 0″.6, and, on the average, 0″.3.

The error of division for the mean of four microscopes, on the settings used, does not appear to exceed 0″.1 on the average. The comparison of the undividual readings corrected for eccentricity, gives for the *probable error* of the reading upon a single microscope ± 0″.25, which is larger than that usually found in making comparisons by other means. R. H. T., Jr.

The Dallmeyer Lens of the Eclipse Expedition.

In No. 31 of the *A. S. P. Publications*, under the heading, "Acknowledgments," the name of Hon. Wm. M. Pierson should have been included in the list of those who had materially aided the expedition.

Mr. Pierson's practical interest in astronomy is well known to Californians. From his private observatory he furnished the expedition with the excellent Dallmeyer lens of 6-inches aperture with which such valuable eclipse negatives were secured. The same lens was also used in several series of observations for determining the photographic absorption of light rays by our atmosphere at the altitude 6600 feet.

A number of long-exposure photographs of interesting celestial objects visible in the southern sky were also secured with Mr. Pierson's lens. J. M. S.

The Observatory on Mont Blanc.

The construction of a small observatory on Mont Blanc for the venerable astronomer, M. Janssen, of Meudon, France, a work of very great difficulty and danger, has progressed satisfactorily the past summer. The foundation has been firmly fixed in the snow and ice, and the building is practically enclosed. From a recent publication of the French Academy we learn that M. Janssen visited the new observatory in September, and was able to make a spectroscopic observation of great interest. It related to the question of oxygen in the atmosphere of the Sun. One of the most striking features of the